

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 5125

TITLE: ECOLOGIST I

GRADE: S-20

DEFINITION:

Under direct supervision, performs entry-level technical and developmental tasks in support of limited portions of various water resources and biological science activities; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

Positions allocated to the Ecologist I class either perform work which is, and will continue to be, more routine, less complex and narrower in scope than work at the Ecologist II level; OR serve in a trainee capacity with noncompetitive promotional progression to the full-performance Ecologist II level.

ILLUSTRATIVE DUTIES:

Monitors physical, chemical, and biological conditions of the County's streams, lakes, ponds and other water bodies;

Prepares data for analysis and inclusion in water quality monitoring reports;

Assists in assessing the impacts of development and stormwater management systems on the ecological health of County streams and stream valleys;

Performs monitoring of stormwater infrastructure and streams;

Assists in the preparation of Virginia Pollutant Discharge Elimination System (VPDES) permit reports;

Assists in performing and reviewing Resource Protection Area (RPA) and wetland delineation studies;

Organizes data to assist in developing stormwater and watershed management plans;

Responds to citizen and business community questions regarding stream conditions;

Participates in public outreach activities including the development of brochures, reports and web pages;

Participates in public meetings and educational programs;

Maintains contact databases;

Participates in training and coordinating volunteers in water quality monitoring to support countywide monitoring efforts.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES:

General knowledge of stream ecology, bioassessments protocols, and stream habitats;

General knowledge of local, federal and state regulations, codes, and ordinances related to the Federal Clean Water Act;

General knowledge of wetland regulations and permitting requirements;

Knowledge of fish communities and field identification to the species level;

Knowledge of benthic macro invertebrate communities and laboratory identification to the genus level;

Knowledge of laboratory and field safety procedures, and the handling, storage and transfer of flammable and/or toxic chemicals;

Knowledge of stream classification methodologies;
Knowledge of Wetland Delineation techniques including the U.S. Corps of Engineers' Wetland Identification and Delineation Manual;
Knowledge of personal computers, associated hardware, and networked environments for the development, storage and dissemination of environmental data;
Ability to collect samples and perform field analysis of water chemistry parameters;
Ability to calibrate and maintain field equipment used in water quality monitoring;
Ability to analyze and manage environmental data using databases, spreadsheets, and statistical programs;
Ability to communicate technical and semi-technical issues effectively, both orally and in writing, to a wide range of audiences;
Ability to carry field equipment and hike long distances over rough terrain;
Ability to operate a motor vehicle.

EMPLOYMENT STANDARDS:

Any combination of education, experience, and training equivalent to the following:
Graduation from an accredited college or university with a Bachelor's degree in aquatic ecology, biology, environmental science, limnology, natural resource management, or a related field.

CERTIFICATES AND LICENSES REQUIRED:

Possession of a valid motor vehicle driver's license.

NECESSARY SPECIAL REQUIREMENTS:

None.

ESTABLISHED: February 17, 2004

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